

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/579,879
Source: IFWP
Date Processed by STIC: 5-31-06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



IFWP

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

3 <110> APPLICANT: The Government of the United States of America, as
 4 represented by the Secretary of the Department of Health and
 5 Human Services
 6 Flomerfelt, Francis
 7 Gress, Ronald
 9 <120> TITLE OF INVENTION: SPATIAL FOR ALTERING CELL PROLIFERATION
 11 <130> FILE REFERENCE: 4239-64851-02
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/579,879
 C--> 13 <141> CURRENT FILING DATE: 2006-05-17
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2002/036874
 14 <151> PRIOR FILING DATE: 2003-11-18
 16 <160> NUMBER OF SEQ ID NOS: 7
 18 <170> SOFTWARE: PatentIn version 3.3
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 933
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Mus musculus
 26 <220> FEATURE:
 27 <221> NAME/KEY: CDS
 28 <222> LOCATION: (84)..(677)
 29 <223> OTHER INFORMATION: Coding sequence
 31 <400> SEQUENCE: 1
 32 tcttgagggtt gccaatTTTT tttttttttt tttttttttt tttttttttt ggtttgggga 60
 34 gaaacttggtg ttggaaccag ccc ctg ttt ctg ggg aat gta tat aag ggg agt 113
 35 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser
 36 1 5 10
 38 tta gca cct cgt agg gat gag gtg act agt cca aag gca gag ccc cag 161
 39 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln
 40 15 20 25
 42 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg 209
 43 Pro Glu Thr Lys Pro Glu Asn Leu Pro Arg Ser His Gly Asp Val Gly
 44 30 35 40
 46 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc 257
 47 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile
 48 45 50 55
 50 cat gag gag ctg aag acc aca aag ccc caa aca tca caa cca aca ccc 305
 51 His Glu Glu Leu Lys Thr Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro
 52 60 65 70
 54 agt gcc tac cgc ttt gga cgc cta agc cac cat tcc ttc ttc tcg agg 353
 55 Ser Ala Tyr Arg Phe Gly Arg Leu Ser His His Ser Phe Phe Ser Arg
 56 75 80 85 90
 58 cac cac ccc caa cca cag cga gtg act cat atc caa gat atc gct ggg 401
 59 His His Pro Gln Pro Gln Arg Val Thr His Ile Gln Asp Ile Ala Gly

Does Not Comply
 Corrected Diskette Needed
 (Pg - 5)

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

```

60          95          100          105
62 aag cct gtc tgc gtg gtc agg gac gag ttc tct ctg tcg gcc ttg act      449
63 Lys Pro Val Cys Val Val Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr
64          110          115          120
66 cag ccc aca ttc tta tcc cgc tgt ctg atg ggg atg ccc acc atc tct      497
67 Gln Pro Thr Phe Leu Ser Arg Cys Leu Met Gly Met Pro Thr Ile Ser
68          125          130          135
70 gtc ccc att ggg gat cca cag tcc aat cgg aac ccc cag ctt tct act      545
71 Val Pro Ile Gly Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr
72          140          145          150
74 tct gac acc tgg agg aag aaa ctg aag gac ctg gct tcc cga gtg act      593
75 Ser Asp Thr Trp Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg Val Thr
76 155          160          165          170
78 gtc ttc act aag gaa atc cag cca aag ccc gat gag gtt ggt gtt gca      641
79 Val Phe Thr Lys Glu Ile Gln Pro Lys Pro Asp Glu Val Gly Val Ala
80          175          180          185
82 caa aga atg gag cct aga aaa aaa agg cct tct taa gtctcccaaa      687
83 Gln Arg Met Glu Pro Arg Lys Lys Arg Pro Ser
84          190          195
86 tgctcagctg ctggcacggg aggggaagga ccctcataac ctcgaagggtg acagcgaaaa      747
88 tcaaagaaac acaaaatcac acctagcaga gaaatccaag aagggttccc agaaacaccc      807
90 tctaaagcaa ctgttcccaa cctgtctaata gccttgaccc ttgaatacag tttctcacac      867
92 tgcagtaacc cctgcccccg aaataaaaatt attttcatta ctacttcaaa aaaaaaaaaa      927
94 aaaaaa      933
97 <210> SEQ ID NO: 2
98 <211> LENGTH: 197
99 <212> TYPE: PRT
100 <213> ORGANISM: Mus musculus
102 <400> SEQUENCE: 2
104 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser Leu Ala Pro Arg Arg Asp
105 1          5          10          15
108 Glu Val Thr Ser Pro Lys Ala Glu Pro Gln Pro Glu Thr Lys Pro Glu
109          20          25          30
112 Asn Leu Pro Arg Ser His Gly Asp Val Gly Leu Gln Lys Glu Thr Val
113          35          40          45
116 Val Pro Gly Ile Val Asp Phe Glu Leu Ile His Glu Glu Leu Lys Thr
117          50          55          60
120 Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro Ser Ala Tyr Arg Phe Gly
121 65          70          75          80
124 Arg Leu Ser His His Ser Phe Phe Ser Arg His His Pro Gln Pro Gln
125          85          90          95
128 Arg Val Thr His Ile Gln Asp Ile Ala Gly Lys Pro Val Cys Val Val
129          100          105          110
132 Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr Gln Pro Thr Phe Leu Ser
133          115          120          125
136 Arg Cys Leu Met Gly Met Pro Thr Ile Ser Val Pro Ile Gly Asp Pro
137          130          135          140
140 Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr Ser Asp Thr Trp Arg Lys
141 145          150          155          160

```

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

```

144 Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys Glu Ile
145                               165                               170                               175
148 Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu Pro Arg
149                               180                               185                               190
152 Lys Lys Arg Pro Ser
153                               195
156 <210> SEQ ID NO: 3
157 <211> LENGTH: 1035
158 <212> TYPE: DNA
159 <213> ORGANISM: Mus musculus
162 <220> FEATURE:
163 <221> NAME/KEY: CDS
164 <222> LOCATION: (84)..(779)
165 <223> OTHER INFORMATION: Coding sequence
167 <400> SEQUENCE: 3
168 tcttgagggtt gccaatTTTTT tttttttttt tttttttttt tttttttttt gggttgggga      60
170 gaaacttggtg ttggaaccag ccc ctg ttt ctg ggg aat gta tat aag ggg agt      113
171                               Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser
172                               1                               5                               10
174 tta gca cct cgt agg gat gag gtg act agt cca aag gca gag ccc cag      161
175 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln
176                               15                               20                               25
178 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg      209
179 Pro Glu Thr Lys Pro Glu Asn Leu Pro Arg Ser His Gly Asp Val Gly
180                               30                               35                               40
182 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc      257
183 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile
184                               45                               50                               55
186 cat gag gag ctg aag acc aca aag ccc caa aca tca caa cca aca ccc      305
187 His Glu Glu Leu Lys Thr Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro
188                               60                               65                               70
190 agt gcc tac cgc ttt gga cgc cta agc cac cat tcc ttc ttc tcg agg      353
191 Ser Ala Tyr Arg Phe Gly Arg Leu Ser His His Ser Phe Phe Ser Arg
192 75                               80                               85                               90
194 cac cac ccc caa cca cag cga gtg act cat atc caa gtt aca gga aga      401
195 His His Pro Gln Pro Gln Arg Val Thr His Ile Gln Val Thr Gly Arg
196                               95                               100                               105
198 gag gac ctg gag cac tcc ctg ccc ctc acc acc tct ttc cag ctc ctt      449
199 Glu Asp Leu Glu His Ser Leu Pro Leu Thr Thr Ser Phe Gln Leu Leu
200                               110                               115                               120
202 caa gct cct ggg gtc cag ccc atg gat ctc act ccc tct gca gat atc      497
203 Gln Ala Pro Gly Val Gln Pro Met Asp Leu Thr Pro Ser Ala Asp Ile
204                               125                               130                               135
206 gct ggg aag cct gtc tgc gtg gtc agg gac gag ttc tct ctg tcg gcc      545
207 Ala Gly Lys Pro Val Cys Val Val Arg Asp Glu Phe Ser Leu Ser Ala
208                               140                               145                               150
210 ttg act cag ccc aca ttc tta tcc cgc tgt ctg atg ggg atg ccc acc      593
211 Leu Thr Gln Pro Thr Phe Leu Ser Arg Cys Leu Met Gly Met Pro Thr
212 155                               160                               165                               170

```

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

```

214 atc tct gtc ccc att ggg gat cca cag tcc aat cgg aac ccc cag ctt      641
215 Ile Ser Val Pro Ile Gly Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu
216          175          180          185
218 tct act tct gac acc tgg agg aag aaa ctg aag gac ctg gct tcc cga      689
219 Ser Thr Ser Asp Thr Trp Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg
220          190          195          200
222 gtg act gtc ttc act aag gaa atc cag cca aag ccc gat gag gtt ggt      737
223 Val Thr Val Phe Thr Lys Glu Ile Gln Pro Lys Pro Asp Glu Val Gly
224          205          210          215
226 gtt gca caa aga atg gag cct aga aaa aaa agg cct tct taa      779
227 Val Ala Gln Arg Met Glu Pro Arg Lys Lys Arg Pro Ser
228          220          225          230
230 gtctcccca tgctcagctg ctggcacggg aggggaagga cctcataac ctggaagggtg      839
232 acagcgaaaa tcaagaaaa acaaaatcac acctagcaga gaaatccaag aagggttccc      899
234 agaaacaccc tctaaagcaa ctgttcccaa cctgtctaata gccttgaccc ttgaatacag      959
236 tttctcacac tgcagtaacc cctgcccccg aaataaaaatt attttcatta ctacttcaaa 1019
238 aaaaaaaaaa aaaaaa      1035
241 <210> SEQ ID NO: 4
242 <211> LENGTH: 231
243 <212> TYPE: PRT
244 <213> ORGANISM: Mus musculus
246 <400> SEQUENCE: 4
248 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser Leu Ala Pro Arg Arg Asp
249 1          5          10          15
252 Glu Val Thr Ser Pro Lys Ala Glu Pro Gln Pro Glu Thr Lys Pro Glu
253          20          25          30
256 Asn Leu Pro Arg Ser His Gly Asp Val Gly Leu Gln Lys Glu Thr Val
257          35          40          45
260 Val Pro Gly Ile Val Asp Phe Glu Leu Ile His Glu Glu Leu Lys Thr
261          50          55          60
264 Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro Ser Ala Tyr Arg Phe Gly
265 65          70          75          80
268 Arg Leu Ser His His Ser Phe Phe Ser Arg His His Pro Gln Pro Gln
269          85          90          95
272 Arg Val Thr His Ile Gln Val Thr Gly Arg Glu Asp Leu Glu His Ser
273          100          105          110
276 Leu Pro Leu Thr Thr Ser Phe Gln Leu Leu Gln Ala Pro Gly Val Gln
277          115          120          125
280 Pro Met Asp Leu Thr Pro Ser Ala Asp Ile Ala Gly Lys Pro Val Cys
281          130          135          140
284 Val Val Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr Gln Pro Thr Phe
285 145          150          155          160
288 Leu Ser Arg Cys Leu Met Gly Met Pro Thr Ile Ser Val Pro Ile Gly
289          165          170          175
292 Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr Ser Asp Thr Trp
293          180          185          190
296 Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys
297          195          200          205
300 Glu Ile Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu

```

RAW SEQUENCE LISTING

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:45

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

```

301      210      215      220
304 Pro Arg Lys Lys Arg Pro Ser
305 225      230
308 <210> SEQ ID NO: 5
309 <211> LENGTH: 2117
310 <212> TYPE: DNA
311 <213> ORGANISM: Mus musculus
314 <220> FEATURE:
315 <221> NAME/KEY: CDS
316 <222> LOCATION: (40)..(1365)
318 <400> SEQUENCE: 5
319 aagaaaagaa ggagaataga ggagctgctg gctgagaaa atg gct gtt gat ggt      54
320      Met Ala Val Asp Gly
321      1      5
323 ggg tgt ggg gac act gga gac tgg gaa ggt cgc tgg aac cat gta aag      102
324 Gly Cys Gly Asp Thr Gly Asp Trp Glu Gly Arg Trp Asn His Val Lys
325      10      15      20
327 aag ttc ctc gag cgg tct gga ccc ttc aca cac ccc gat ttc gaa cca      150
328 Lys Phe Leu Glu Arg Ser Gly Pro Phe Thr His Pro Asp Phe Glu Pro
329      25      30      35
331 agc act gaa tca ctc cag ttc ttg tta gat aca tgt aaa gtt cta gtc      198
332 Ser Thr Glu Ser Leu Gln Phe Leu Leu Asp Thr Cys Lys Val Leu Val
333      40      45      50
335 att gga gct ggt ggc tta gga tgt gag ctt ctg aaa aat ctg gca tta      246
336 Ile Gly Ala Gly Gly Leu Gly Cys Glu Leu Leu Lys Asn Leu Ala Leu
337      55      60      65
339 tct ggt ttt aga cag att cat gtt ata gac atg gac act ata gat gtt      294
340 Ser Gly Phe Arg Gln Ile His Val Ile Asp Met Asp Thr Ile Asp Val
341 70      75      80      85
343 tcc aat tta aat aga cag ttt tta ttt agg cct aaa gat gty gga aga      342
W--> 344 Ser Asn Leu Asn Arg Gln Phe Leu Phe Arg Pro Lys Asp Xaa Gly Arg
345      90      95      100
347 ccc aag gct gaa gtt gct gca gaa ttc cta aat gac aga gtt cct aac      390
348 Pro Lys Ala Glu Val Ala Ala Glu Phe Leu Asn Asp Arg Val Pro Asn
349      105      110      115
351 tgc aac gtg gtm cca cat ttc aac aag atw caa gat ttt aac gac act      438
W--> 352 Cys Asn Val Xaa Pro His Phe Asn Lys Xaa Gln Asp Phe Asn Asp Thr
353      120      125      130
355 ttc tac cga caa ttt cat atc att gta tgt ggc ctg gac tct atc ata      486
356 Phe Tyr Arg Gln Phe His Ile Ile Val Cys Gly Leu Asp Ser Ile Ile
357      135      140      145
359 gcg aga aga tgg atc aat gga atg ctg ata tct ctt cta aat tat gaa      534
360 Ala Arg Arg Trp Ile Asn Gly Met Leu Ile Ser Leu Leu Asn Tyr Glu
361 150      155      160      165
363 gat ggt gtg ttg gat cca agc tcc att gta cct ttg ata gat ggg ggg      582
364 Asp Gly Val Leu Asp Pro Ser Ser Ile Val Pro Leu Ile Asp Gly Gly
365      170      175      180
367 aca gaa ggc ttt aaa ggg aat gcc cga gtg att ttg cct gga atg acc      630
368 Thr Glu Gly Phe Lys Gly Asn Ala Arg Val Ile Leu Pro Gly Met Thr

```

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006
TIME: 13:23:46

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\05312006\J579879.raw

Error Explanation

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 99,121,127,222

Seq#:6; Xaa Pos. 99,121,127,222

VERIFICATION SUMMARY

DATE: 05/31/2006

PATENT APPLICATION: US/10/579,879

TIME: 13:23:46

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:344 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:5
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:342
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:438
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:726
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:96
L:515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:112
L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:208